

3. (Amended) A rotating electric machine according to claim 1, characterized in that the cavity is defined by a spheroid.

4. (Amended) A rotating electric machine according to claim 1, characterized in that the cavity is defined by a sphere.

5. (Amended) A rotating electric machine according to claim 1, characterized in that the air gap, in a direction normal to the limiting surface of the cavity, has a uniform thickness.

6. (Amended) Use of a rotating electric machine according to claim 1 for connection to a power network.

7. (Amended) Use of a rotating electric machine according to claim 1 as a generator in a conveyance powered by an internal-combustion engine.

8. (Amended) Use of a rotating electric machine according to claim 1 as a prime mover for a conveyance.

9. (Amended) Use of a rotating electric machine according to claim 1 as a prime mover in an electrical domestic appliance.

10. (Amended) A method for manufacturing a rotating electric machine comprising a stator, which is provided with a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, is adapted to rotate with one degree of freedom, which rotor is separated from the stator by an air gap, characterized in arranging a rounded cavity in the stator and having the cavity to surround the rotor at all sides.

11. (Amended) A method according to claim 10, characterized in forming the cavity to adapt the shape of a mirror symmetrical solid of revolution which diameter at least at the end parts is decreasing.

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12. (Amended) A method according to claim 10, characterized in forming the cavity to be limited by a spheroid.

13. (Amended) A method according to claim 10, characterized in forming the cavity to be limited by a sphere.

14. (Amended) A method for manufacturing a rotating electric machine comprising a stator with a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, rotates with one degree of freedom, characterized in the steps of;

- forming the rotor to be limited by essentially a spheroid,
- providing a stator core containing a rounded cavity to surround the rotor, and
- providing the stator core a winding to form a complete stator.

15. (Amended) A rotating electric machine comprising a stator, including a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, rotates with one degree of freedom around an axle, characterized in that the stator core comprises a rounded cavity surrounding the rotor at all sides, that when powered a balanced three-dimensionally directed magnetic field operates between the stator and the rotor, and that the magnetic field comprises magnetic vectors, each having an active component parallel to the rotor axle.

16. (Amended) A rotating electric machine comprising a stator, including a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, rotates with one degree of freedom, characterized in that the stator core comprises a rounded cavity surrounding the rotor at all sides and that the winding comprises a cable.

17. (Amended) A rotating electric machine according to claim 16, characterized in that the cable is a high-voltage cable.--